Product Support 101

Product support within the Department of Defense (DoD) is defined as the package of support functions required to field and maintain the readiness and operational capability of major weapon systems, subsystems, and components, including all functions related to weapon system readiness (Source: 10 U.S.C §2337), including but not limited to materiel management, distribution, technical data management, maintenance, training, cataloging, configuration management, engineering support, repair parts management, failure reporting and analyses, and reliability growth tracking and the logistics (integrated product support) elements (e.g., support equipment, spares) related to weapon systems readiness. (Source: Directive Type Memorandum (DTM) 10-015; note: DTM 10-015 was rescinded with the issuance of the January 2015 DoD Instruction 5000.02). In a nutshell, Product Support within the DoD:

- Is a key life cycle management enabler and includes considerations germane to both acquisition and logistics; those considerations begin prior to Milestone A with early requirements determination, and continue through system design, development, operational use, retirement, and disposal
- Is a primary responsibility of the DoD <u>Program Manager</u> and their <u>Product Support Manager</u> (<u>PSM</u>), but with interdisciplinary engagement from across the defense acquisition and defense logistics communities, and their industry partners
- Is the package of support functions required to deploy and maintain the readiness and operational capability of major weapon systems, subsystems, and components
- Is the package of product support functions related to weapon system readiness and which can be performed by both public and private entities
- Is scoped by the 12 Integrated Product Support (IPS) Elements, which provide a structured and integrated framework for managing product support; these elements are an expansion of the traditional 10 Integrated Logistics Support (ILS) elements and should be considered during development, implementation, and subsequent revalidation of the product support strategy
- Requires integration with systems & sustaining engineering activities in order to deliver an effective and affordable product support package
- Requires Product Support Manager involvement early in design and throughout the life cycle in order to ensure a reliable, available, maintainable, supportable, and affordable weapon system

Why is this so critical? The GAO captured the essence in a 2003 report (GAO-03-57) which stated, "Traditionally, development and procurement have accounted for about 28 percent of a weapon's total ownership cost, while costs to operate, maintain, and dispose of the weapon system account for about 72 percent of the total. For a number of years, the department's goal has been to spend less on supporting systems and to devote more funds to development and procurement in order to modernize weapon systems. But, in fact, growth in operating and support costs has limited the department's buying power. DOD officials have cited shortages of spare parts and unreliable equipment as reasons for low mission-capable rates for some weapons. As a result, some modernization has been postponed in order to pay high and unexpected operating and maintenance costs."

Why else? In 2009, the seminal <u>DoD Weapon System Acquisition Reform: Product Support Assessment</u> reiterated the criticality of getting product support right, saying, "it is crucial to our national interest that product support achieves a level of performance equal to its critical importance", saying it was imperative "...to drive the next generation of product support strategies toward that objective, with a clear vision to achieve aligned and synchronized operational, acquisition, and sustainment communities working together to deliver required and affordable Warfighter outcomes" and "...the challenges of affordability constraints, the need to upgrade equipment and infrastructure, and a continuing, persistent operations

tempo prescribe a clear need for DoD implementation of an integrated plan to address product support across the Defense enterprise. Successful change in weapon system product support will be demonstrable by reducing costs while maintaining equal or greater equipment readiness support for key warfighting capabilities."

In addition to the "<u>DoD Life Cycle Logistics Career Field Overview</u>" overview, several additional key references and sources of information (in no particular order) on this important topic

- Key Product Support Definitions
- <u>DoD Product Support Business Model (PSBM)</u>
- Product Support Key References (Key Policy, Guidance, Tools & Training)
- <u>DoD Product Support Manager (PSM) Guidebook</u>
- DoD Instruction 5000.02 Enclosure 6 Life-Cycle Sustainment Planning
- Defense Acquisition Guidebook (DAG) Chapter 5
- DAU 12 Integrated Product Support (IPS) Elements Website
- DoD Weapon System Acquisition Reform: Product Support Assessment
- DAU Logistics Community of Practice (LOG CoP) PSM Resource Repository
- DoD Life Cycle Sustainment Plan (LCSP) Outline
- DAU Logistics & Sustainment Center Director's Blog on the Defense Acquisition Portal
- DAU Logistics Community of Practice (LOG CoP)
- DoD Logistics Human Capital Strategy
- DoD Weapon System Acquisition Reform: Product Support Assessment
- Life Cycle Logistics & Product Support Article List
- Product Support Analytical Tools Database
- Defense AT&L Magazine "Product Support Special Issue" (March-April 2013)
- Defense AT&L Magazine Article: "10 Things Great Program Managers Know About Product Support"
- Air Force Product Support Enterprise Vision (PSEV)

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